

Coastal America News Brief

October, 2011

Student Summit 2011 Update

Learning Centers at the Student Summit

Alaska SeaLife Center

Aquarium of the Pacific

Dauphin Island Sea Lab

Georgia Aquarium

Gulf Coast Research Laboratory-Marine Education Center

Monterey Bay Aquarium

Mystic Aquarium

National Aquarium in Baltimore

National Mississippi River Museum and Aquarium

North Carolina Aquarium at Fort Fisher

Oregon Coast Aquarium— Hatfield Marine Science Center

Shedd Aquarium

South Carolina Aquarium

Texas State Aquarium

The Florida Aquarium

New England Aquarium

Seattle Aquarium

Veracruz Aquarium

Waikiki Aquarium

For more information about Coastal America or the 2011 Student Summit, visit

www.coastalamerica.gov

Student Delegates' Activities Inspired by the Third National Student Summit on the Ocean and Coasts

Designed to develop future ocean scientists and leaders, and teach high school students about the interconnectedness between the ocean, coasts, Great Lakes, inland seas and climates, the theme of the Third National Student Summit was the Third Principle of Ocean Literacy: The Ocean is a major influence on weather and climate - and its inverse. Through the use of video projects, action plans, posters, lectures and workshops, this next generation was engaged and galvanized.

After facilitated sessions where they worked on developing an agreement about their concerns for the condition of the ocean, these student delegates from twenty



Aquarium of the Pacific student volunteers use the climate change games as a hands-on learning tool for guests.

Coastal Ecosystem Learning Centers (CELCs) signed a consensus proclamation that declared their conviction of the need for action to save the ocean and expressed their dedication to bringing this understanding to their communities. Since the Summit, student delegates have worked hard to implement their action plans and follow through with their commitment to their objectives described in the proclamation.

Alaska



One of the Alaska Sea Life Center delegate's sticker designs.

The Alaska SeaLife Center student delegates completed their project during the summer. They printed stickers and hung posters in local businesses that pointed local summer tourists to their website,

greenalaska.wikispaces.com.

Through website exposure, visitors learned more about ocean acidification, its impact on local animals, and what they could do to help reduce their carbon footprint.

Pacific Islands

After the Summit, the Waikiki Aquarium student delegates returned to the island of Oahu. They have been staying true to their slogan, 'Malama I Ka Wai- Protect our Water' by doing research and re-evaluating their proposed actions based on the water needs of their community. The students are implementing community outreach efforts this fall.

The Northwest



The Seattle Aquarium delegates were honored by the Suquamish tribe.

Immediately after the Student Summit, the Suquamish student delegates from the **Seattle Aquarium** presented their film, 'Our

Home' at the National Museum of the American Indian in Washington, D.C. Returning home, the students continued to monitor the Suquamish Tribal Beach, with the support of their school. They have been honored by their tribe for the work they are doing to educate others about how ocean acidification affects their community.

Student delegates from the Oregon Coast/ Hatfield Marine Science Center continue to give presentations to their peers, sharing information



Oregon Coast/Hatfield Marine Science Center delegates don their motto: "Grow a backbone for those who can't."

about the impacts of hypoxia and ocean acidification on the local community. They

are showing others how they can make a difference protecting the environment and natural resources for future generations.

The Southwest

In April, the students from the Monterey Bay Aquarium, also known as the Fantoxic Four, participated in their local Earth Day celebration by running their own interactive education booth. With the goal of raising awareness about ocean acidification and reducing their carbon footprint, the students pro-

vided hands-on learning activities designed to help children understand the basics of ocean acidification and how it can affect the food web. As Timothy M. Beardsley, editor-inchief of "BioScience" has stated, "It is hard to generate public concern about ocean acidification because it is detected only



Monterey Bay Aquarium delegates teach children how to reduce their carbon footprint.

through instruments and is as yet largely inconsequential to the average American." Yet the student delegates of Monterey Bay Aquarium are inventing creative ways to explain these concerns in a manner that even children might comprehend.

The student delegates also won a second place award in the high school division of the Monterey Bay National Marine Sanctuary Symposium: Currents 2011 poster contest, hosted by the California State University at Monterey Bay. They presented their poster on the effect of ocean acidification on crabs to an audience of over 300 experts, scientists and educators.

The student delegates at the **Aquarium of the Pacific** finished turning an old gasoline VW bug into a hybrid electric car. They



The Aquarium of the Pacific delegates converted this car to run electrically.

have also been using the climate change game they created to stimulate climate conversations with Aquarium guests. The game was translated into Spanish and used at the Baja Splash Cultural festival in September. The climate change game will also be incorporated into use 'on the road' and at conventions. Ten new Marine Science Academy high school volunteers will begin their training in October to serve as climate change interpreters at the Aquarium.

Gulf of Mexico

During the month of April, the Aquario de Veracruz student delegates gave presentations to middle school students in Boca del Rosa, Veracruz, Mexico. As a way to better capture the attention of other teens, the students used two interactive learning tools. Loteria and Tiro al blanco. These games teach about the ocean's influence on climate and encourage participation in future conservation efforts. The team is also working with Veracruz City Hall to gain support for beach cleaning and restoration projects.

The students at the **Texas Aquarium** participated in two local festivals, the Texas A&M University at Corpus Christi's Earth Day Bay Day and the Texas State Aquarium's Howdy Daze. Manning information booths, they shared information with adults and children alike about the impor-

tance of oysters and oyster reef restoration. These students have also been reaching out to children at summer camps, using interactive games to teach them about the importance of oysters. Learn more at:

ccoceansum-mit.blogspot.com

The J.L. Scott Gulf Coast **Research Lab and Marine Education Center** student delegates delivered a presentation on Hurricane Preparation and Prediction to over 140 students at the Bay St. Louis Middle School. The delegates discussed the major concepts and misconceptions about hurricanes and what's necessary to be prepared. The team handed out hurricane preparation brochures to incoming freshman at Pearl River Community College and the University of Southern Mississippi's-Gulf Park.

The **Dauphin Island Sea Lab** delegates planted



The Texas State Aquarium student delegates will help build a new oyster reef thanks to newly awarded funding.

grasses to help restore barrier island dune areas and salt marshes. A new group of students will continue their efforts with the help of funds from the Grasses in Classes program. Hoping to inspire and educate a younger generation of conservationists, the students also used live animals and plants to teach elementary school students about estuarine habitats.

The delegates from the Florida Aquarium shared their knowledge of conservation with campers during the Aquarium's Summer Camp. Thanks to a new grant program from the Gulf of Mexico Alliance, one student will join the Aquarium staff yearround as an Aquarium host to teach middle school students about climate change science.

The Southeast



At the premier, a North Carolina at Fort Fisher delegate talks to the press about what she learned while making the film.

The student delegates from the North Carolina Aquarium at Fort Fisher completed the development of their educational film about the impact of climate change on the North Carolina coasts. The film premiered on Wednesday, September 28th at the North Carolina Aquarium!

These dynamos update their Cape Fear Student Summit blog on a regular basis and are using their film project to encourage others to get involved. They have released a second video, "Do What's Right, Turn Off that Light," to high-

light the importance of conserving energy. Follow the link to watch both of their films and check out the accompanying classroom curriculum.

http://vimeo.com/29661987

Throughout the school year, the student delegates from the **South Carolina Aquarium** visited local elementary schools to talk about how climate change impacts sea turtles. During summer programs at a local Children's Museum, the students continue to teach the public about sea turtles and the conservation of their habitat.

Mid-Atlantic



The National Aquarium in Baltimore student delegates planting native grasses at Poplar Island.

In June, the delegates from the **National Aquarium in Baltimore** participated in a marsh restoration effort on Poplar Island located in the Chesapeake Bay. Poplar Island--a 1,000

-acre single island in 1847-- has nearly disappeared due to increasing natural erosion. Only five remnants, (totaling 79 acres) currently exist. The Army Corps of Engineers has been bringing in clean dredge material to rebuild the island, but more effort is needed to create habitat on the new land. The students planted 2,500 native grasses over a 2-acre area, to provide natural habitat for egrets, terns, cormorants, herons, black ducks, and bald eagles. The students continue to teach their community about climate change and sea level rise by volunteering at the Aguarium and performing educational plays for children at local libraries.

Northeast



Mystic delegates teaching the next generation .

The Mystic Aquarium's
Youth Conservation Corps
completed the amphibian
monitoring component of
their action plan and began
their monthly frog research
program. The students
also participated in three
celebrations over the summer including Earth Day,
World Oceans Day and
Long Island Sound Day,
sharing their knowledge of

how humans impact the earth and the ocean. They explained the importance of estuarine environments through interactive activities and crafts. One of the delegates was recently accepted into a new Marine Science Magnet High School where she will continue to pursue her newfound interests.

The New England Aguarium delegation continued their work exploring the link between the ocean and climate change through the study of Atlantic Herring, a species threatened by oxygen depletion. The team also recently participated in the Herring Run Cleanup in Weymouth, MA. Volunteers removed debris and replaced eroding fish ladders to ease the migration of river herring to Whitman's Pond.

Upper Mississippi/ Great Lakes

The John G. Shedd
Aquarium student delegates remained active within the Shedd programs, including Club Shedd. With the start of the new school year the students will continue working on the implementation of their action plan. They also participated in the Coastal America/JASON Project CZ11 live webcast and Family Day at the Shedd Aquarium.

The National Mississippi River Museum & Aquarium students completed all their water testing and found that the landfill they were studying is well isolated from surface water. They found minimal measured difference in the chemical/physical stream attributes between where the stream enters the landfill watershed and where it flows into the larger Catfish Creek. All of the students who participated in the Summit plan on studying science or engineering as they head off to college.

Coastal Zone 2011

On July 20th, student delegates from National Mississippi River Museum and Aquarium, the Shedd Aquarium and the Seattle Aquarium got the chance to take their community outreach efforts to the national level! As participants in Family Day and the Coastal America/JASON Project live webcast at the Coastal Zone 2011 conference at the

Shedd Aquarium in Chicago, IL, they aired the videos from their Student Summit projects and discussed with experts the impact of climate change and pollution on the ocean and our living marine resources. If you missed the live webcast, watch the replay by visiting the Coastal America website, www.coastalamerica.gov



New England Aquarium delegates participated in the Herring Run Cleanup in Weymouth, MA.